
Introduction

Welcome to Call Accounting. Use this module to collect call records from a Meridian 1 telephone switch and cost this call information to provide meaningful reports. These will provide details on the actual usage of your telephone system for assessing the effectiveness of your telephone services. Use this system to assign calls to specific groups (or departments) for individual billing purposes and other types of cost allocation.

The following chapters will guide you through the installation, initial configuration, and operation of Call Accounting. This user guide assumes that you have a user level knowledge of the Windows operating system. In order to ensure optimum operation of this module, read the material in this user guide before attempting to run Call Accounting.

Overview

Call Accounting supports the Meridian line of telephone switches. The Meridian 1 must be equipped with a suitable CDR port for proper connection to the CDR buffer unit.

Once you collect the call records from the CDR buffer unit or directly from the Meridian 1, the records must be costed, collated, sorted, and printed on a report. This call detail information will help you achieve the following goals.

- The system provides details on the actual telephone usage. Management can isolate individual users and departments which are not properly utilizing the telephone system through misuse or neglect.

- It provides usage details for cost allocation within the organization or for client billing purposes.
- Management can use the information to determine which telephone company services are not being utilized. This analysis will allow you to adjust your telephone services to suit your needs resulting in a savings to your organization.

CDR buffer units

Call Accounting can either collect CDR data directly from the Meridian 1 or through a buffer unit. The buffer unit is used to continuously collect data from the Meridian 1 and store it for later collection and processing by Call Accounting. Buffer units provide an effective method of collecting CDR data quickly and accurately.

Each buffer unit collects data from a single Meridian 1 and therefore requires its own unique data files. These are stored in a separate directory for each site. CDR data is saved to site specific files so that multiple buffer units (multiple Meridian 1 switches) can be supported concurrently by Call Accounting. Where required, the collection devices can connect to the Meridian 1 via its RS-232 port and connect to the PC using a supported modem. It is recommended that the buffer unit contains battery backup power in the event of a power failure. Refer to the buffer unit's reference user guide for more information.

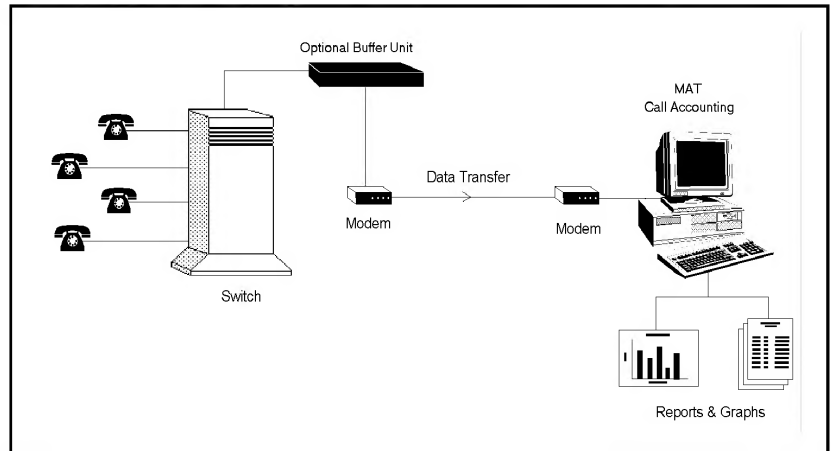
Note: It is recommended that a buffer box be used for CDR data collection from the switch. When a buffer box is used, the CDR data is continuously sent and stored on the buffer box. Periodically, the data will be collected from the buffer box to the PC, usually on a daily basis. A buffer box is not required to use the Call Accounting application. However, if you choose to collect the data directly to the PC without the buffer box, there is a potential for losing CDR data if the PC is rebooted or shut down.

Call records

Every time a call is made or received, the Meridian 1 records it and creates a call record. Call Accounting allows you to take this call record, apply its appropriate costs, assign a department or division to it, and present it on a report.

The following schematic displays the movement of a call record from the Meridian 1 to the reports.

Figure 1
System block diagram



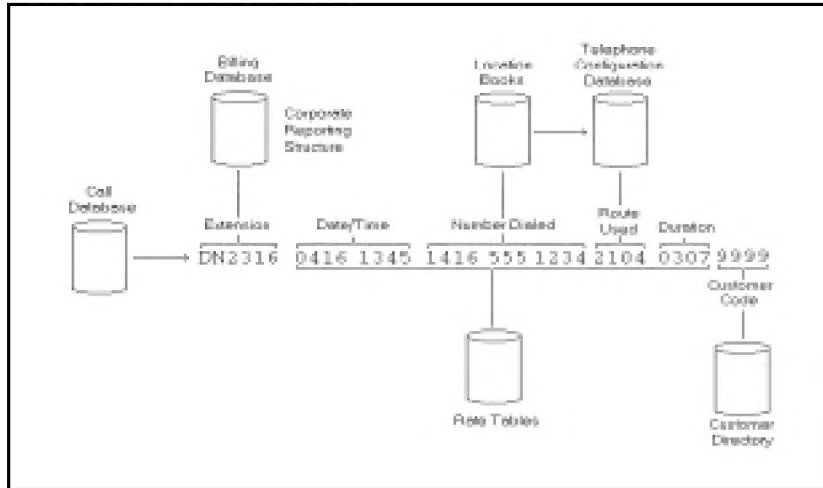
Call record information travels between the buffer unit and the PC through optional modems. This is useful if you are collecting call records from a distant location. If you are connected directly to the buffer unit, simply connect it to your PC's communications port.

The call detail records that you collect from the Meridian 1 or buffer unit contain the information you need to cost the calls and allocate them to the proper users. These records contain such information as the date, time, duration, digits dialed, source, and destination of the call.

By collecting the data from the Meridian 1 or buffer unit, Call Accounting creates the Call Database. Each time a data collection is performed, Call Accounting updates the Call Database. The information from this database is then indexed to provide the proper call costing information.

The following diagram provides a breakdown of the information found in each call record.

Figure 2
Sample call record allocation



Data files

The following paragraphs describe the main data files which Call Accounting maintains. The database files for each site (also known as system) are saved to a specific subdirectory on your PC which corresponds to that site (e.g., C:\MATWORK\DALLAS\ for the Dallas site). This subdirectory is created when the site's files are create in the Site Configuration function from MAT Common Services. Therefore, when you access Call Accounting and initialize its database files, these files will reside on your PC in the predefined directory. Refer to the *MAT Common Services User guide* for complete details on creating sites.

Billing Database (BILLDB1.DAT): The Billing Database contains a list of employees linked to specific extensions on the Meridian 1. This database contains this information as well as the divisions to which this employee belongs. This is initially populated using the Set Database and Custom Database from the MAT Station Administration application and can be modified periodically as required.

Customer Directory (CUST1.DAT): This file contains the names, telephone numbers, and account codes of frequently called customers and clients. This is useful for including specific customers in detail reports.

Call Detail File (DETAIL1.DAT): This temporary storage file contains the raw detail records as collected from the Meridian 1 or buffer unit. The records in this file are in chronological order, however minor variances due to shuffling in the Meridian 1 may occur. This file is used to temporarily store call detail records before they are indexed with the Call Database (MDR1.DAT).

Call Database (MDR1.DAT): This file contains the accumulated call detail data in a format that can be used by the Call Accounting databases. This data is indexed for rapid retrieval and database maintenance.

Index File (INDEX1.DAT): This file contains the indexing information used by the Call Database for faster processing.

Select Report Filters File (SELECT1.DAT): Call Accounting uses this file to set the variables controlling the output parameters of standard reports. It also selects parameters to assemble custom report data.

Summary File (CUMM1.DAT): This file contains data which is accumulated from report calculations. It allows the system to run the Department, Division, and Corporate Summary Reports without reprocessing the entire Call Database. The Extension Detail Report generates this data as an option.

Auto Backup File (BACKUP1.DAT): This file contains the normalized CDR records which is a backup file of the call detail data as it is collected from the Meridian 1 or buffer unit. This will only occur if the Backup Detail File check box in the Communications Database has been enabled. This file is in the same format as the Detail file.

Other Billable Items File (ADDMDR1.DAT): This file contains billable items that did not originate from the Meridian 1 (e.g., credit card calls). You must enter these items manually to include them on your reports.

Report File (REPMLOG1.xxx): When the output device is set to disk, this file will contain a text copy of the generated report.

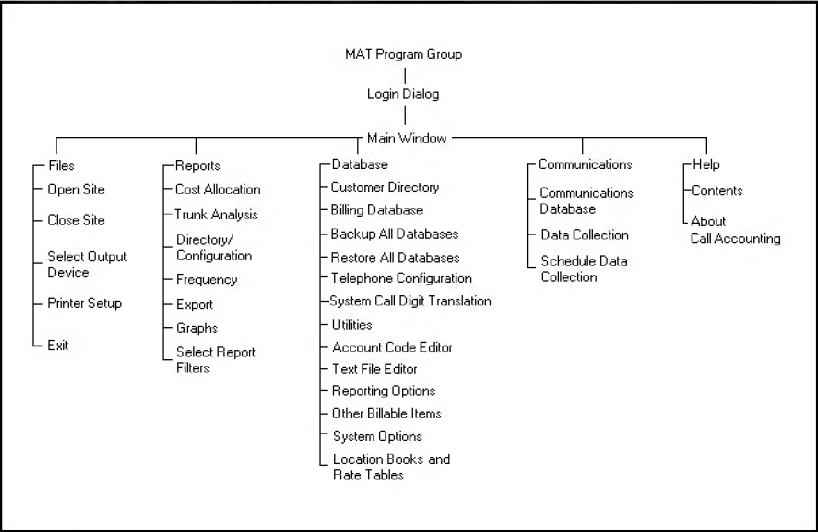
Communications Database (MDRCOMM1.DAT): This file contains the parameters which allow Call Accounting to collect call records from the Meridian 1 or buffer unit.

Configuration Files (CONFIG.DAT and SYS.DAT): These files contain information describing your telephone system and costing information.

Schematic of menus & functions

The following is a schematic of the Call Accounting menus as they are accessed from the main window.

Figure 3
Schematic of menus & functions



File: This command accesses a drop-down menu where you can select commands to open and close site files. You can also specify your output device and printer configuration, and exit from Call Accounting.

Reports: This accesses a drop-down menu from where you can select report filters, and generate reports and graphs to the selected output device.

Cost Allocation Reports: These costing reports display the call record data collected from the Meridian 1.

Trunk Analysis Reports: These reports list information for your Meridian 1's trunks.

Directory/Configuration Reports: These reports list information from your directories and defined telephone configuration.

Frequency Reports: These reports list details and summaries on calls based on calling line ID, ring time, call duration, hold time (if supported), and unanswered calls.

Export Report: This function generates a text format report onto disk which can be used by external programs such as database management systems.

Graphs: This command allows you to generate graphical displays of call detail and trunk information.

Select Report Filters: This function allows you to specify the filters used for your reports.

Database: This accesses a drop-down menu where you can edit and maintain the system's databases and directories, manage call records, and access location books and rate tables.

Customer Directory: This directory contains customer information which is included on your detail reports. Use its commands to add, modify, and delete its records as required.

Billing Database: This database contains a listing of employees and their extensions as defined in the Site Configuration application from MAT Common Services. Use this editor to modify and update employee records. All chargebacks are based on the information contained in this file.

Backup All Databases: This function stores backup copies of the Call Accounting database files to a separate medium for security purposes.

Restore All Databases: This function restores the Call Accounting database files which were previously saved using the Backup function.

Telephone Configuration: This function builds the costing database for the Meridian 1's nodes and trunks.

System Call Digit Translation: This function allows you to alter the value of the digits dialed as they are displayed on call records.

Utilities: These functions are used to manage the Call Database call records.

Account Code Editor: If account codes are used, this function allows you to relate them to specific call records.

Text File Editor: This function allows you to modify text in text format files.

Reporting Options: This function is used to customize report information.

Other Billable Items: This function is used to add charges such as calling card and collect calls to the system. This will help match the system's report totals with the totals from your telephone carrier's bill.

System Options: This function allows you to define general system parameters.

Location Books & Rate Tables: Use these functions to define the

global pricing and rate tables which will be used in your telephone configuration.

Communications: This accesses the functions which are used to set up and perform data collection.

Communications Database: This command accesses the Communications Database where you can define the connection information for each site to be polled. The communications parameters are obtained from the Site Configuration application in MAT Common Services.

Data Collection: This command invokes the data collection for this site (system) using the parameters listed in the Communications Database.

Schedule Data Collection: This command accesses the Scheduler application from MAT Common Services allowing you to schedule data collection at a specific date and time.

Help: This command accesses a drop-down menu from which you can access the Help function listing the contents of the Call Accounting help topics.

MAT users

The MAT system is designed for managers of telecommunications equipment and authorized Northern Telecom distributors. This guide is intended for users who have a working knowledge of Meridian 1 switches and general telecommunications concepts.

This guide assumes you are familiar with PC systems and the Microsoft Windows environment. You should be familiar with the Windows environment before attempting to using the MAT system. A quick review of pertinent Windows information appears in “Windows fundamentals” in the *MAT Common Services User guide*.

There are two levels of access to the MAT system:

- *Administrator* access allows unrestricted use of the MAT system and its functions. The system administrator configures the MAT system, sets up the connections to the Meridian 1, and defines user access to MAT system modules.
- *User* access allows the user to examine data and produce reports.

Conventions used in this user guide

This user guide uses the following terms:

- *Computer system* refers to the hardware and software of an IBM-PC™ or 100% compatible PC.
- *Disk* refers to a high capacity hard disk, required by the MAT system.
- *Windows* refers to Microsoft Windows™ version 3.1 or later.
- *DOS* and *MS-DOS* refer to Microsoft DOS™ version 5.0 or later.
- *Mouse* refers to any standard PC pointing device. Common mouse actions include *point*, *click*, and *double-click*.
- Standard Windows terminology includes *icon*, *window*, *dialog box* (or *dialog*), and *menu*.